CLAIMS

1. A method of diagnosing a disease related to endometriosis, which comprises measuring the level of a histamine-releasing factor (HRF protein) in a biological sample from a subject, comparing the HRF protein level with that of a normal biological sample and determining that the subject showing a significantly higher HRF protein level compared with that of the normal biological sample is a patient with a disease related to endometriosis or a person with high risk thereof.

2. An antibody recognizing an HRF protein.

3. An antibody binding to an epitope different from the one to which an antibody of claim 2 binds.

4. The antibody of claim 2 or 3, obtained by using, as an immunizing antigen, a peptide containing a sequence of 5 to 20 amino acid residues selected from the amino acid sequence at positions 90 to 130 of SEQ ID NO: 2.

5. The antibody of claim 2 or 3, obtained by using, as an immunizing antigen, a peptide containing a sequence of 5 to 20 amino acid residues selected from the amino acid sequence at positions 1 to 95 of SEQ ID NO: 2.

6. The antibody of claim 2 or 3, obtained by using, as an immunizing antigen, a peptide containing a sequence of 5 to 20 amino acid residues selected from the amino acid sequence at positions 115 to 172 of SEQ ID NO: 2.

7. A method of diagnosing a disease related to endometriosis, which comprises at least the following steps of:

(a) contacting a biological sample from a subject with a support on which the antibody of claim 2 has been immobilized;

(b) washing the support with which the biological sample has been contacted in the step (a);

(c) contacting the antibody of claim 3, which has been labeled, with the support washed in the step (b);

(d) measuring a bound label or a free label on the support;

(e) comparing the label amount measured in the step (d), as an indicator of the HRF protein level, with the result of a normal biological sample; and

(f) employing a significantly higher HRF protein level compared with that of the normal biological sample as an indicator showing a disease related to endometriosis or the degree of its risk.

8. A method of diagnosing a disease related to endometriosis, which comprises at least the following steps of:

(a) subjecting a biological sample from a subject to a treatment of tissue fixation;

(b) sectioning the fixed tissue specimen prepared in the step (a);

(c) subjecting the sectioned tissue obtained in the step (b) to immunohistological staining with the antibody of claim 2;

(d) comparing the degree of the immunohistological staining by the step (c), as an indicator of the HRF protein level, with the result of a normal biological sample; and

(e) employing a significantly higher HRF protein level compared with that of the normal biological sample as an indicator showing a disease related to endometriosis or the degree of its risk.

9. A kit for diagnosing a disease related to endometriosis comprising at least the antibody of claim 2, which has been labeled.

10. A kit for diagnosing a disease related to endometriosis comprising at least the following elements:

(a) the antibody of claim 2; and

(b) the antibody of claim 3, which has been labeled.

11. A kit for diagnosing a disease related to endometriosis comprising at least the following elements:

(a) a support on which the antibody of claim 2 has been immobilized; and

(b) an antibody of claim 3, which has been labeled.

12. An antibody recognizing an HRF protein and neutralizing the activity of the HRF protein.

13. A therapeutic drug for a disease related to endometriosis, which comprises the antibody of claim 12.

14. A therapeutic method for a disease related to endometriosis, which comprises administering the antibody of claim 12 or a therapeutic drug of claim 13 into the body.